

Access DB# 78494**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: Pete Heuskoci Examiner #: 60307 Date: 10/23/02
 Art Unit: 1724 Phone Number 30 8-3839 Serial Number: 10/044594
 Mail Box and Bldg/Room Location: CD35P31 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Hologram-Enhanced Hologram Efficiency
 Inventors (please provide full names): Philip D. Sweeney

Earliest Priority Filing Date: 10/14/94

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please do a litigation search
 on U.S. Patent 5,565,109.

Thompson
 JAH

No Litigation Report (

- Sorry for the delay - System problems

STAFF USE ONLY

Searcher: <u>Mellerson</u>	Type of Search	Vendors and cost where applicable
Searcher Phone #: <u>84483</u>	NA Sequence (#) _____	STN _____
Searcher Location: _____	AA Sequence (#) _____	Dialog _____
Date Searcher Picked Up: <u>10/23/02</u>	Structure (#) _____	Questel/Orbit <u>38.98</u>
Date Completed: <u>10/25/02</u>	Bibliographic _____	Dr. Link _____
Searcher Prep & Review Time: _____	Litigation <input checked="" type="checkbox"/>	Lexis/Nexis <u>10/25</u>
Clerical Prep Time: _____	Fulltext _____	Sequence Systems _____
Online Time: _____	Patent Family _____	WWW/Internet _____
	Other _____	Other (specify) _____

Current session 23/10/2002

(C) QUESTEL 1994

QUESTEL.ORBIT (TM) 1998

23/10/02 16*01*57

Last connection: 22/10/02 21*21*49

WELCOME to QUESTEL.ORBIT- Your Guide to INTELLECTUAL PROPERTY
www.questel.orbit.com - Gateway, documentation & IP resource
- PlusPat Family w Legal Status in ONE record - INFO MFAMSTAT
- Now 9 million Images w PlusPat displays - INFO IMG-PLUSPAT
- Latest EP, WO & US Applications in One Alert: INFO APPALERT
- EPAPAT contains all unique EPTEXT data. EPTEXT file removed
- New Patent Citation Commands: easy & precise - INFO PATCITE
- USAPPS Reloaded: Pricing, see INFO USAPPS
- Services Interruption on 27 Oct - see INFO STOP
- USPCL: US Patent Class Definition Look-up File - INFO USPCL
..FILE / ..INFO / ..GUIDE

Query/Command : FILE PLUSPAT

QUESTEL - Time in minutes : 1,97

The cost estimation below is based on Questel's
standard price list

	Estimated cost :	1.70 USD
Cost estimated for the last database search :		1.70 USD
Estimated total session cost	:	1.70 USD

Selected file: PLUSPAT

PLUSPAT - (c) Questel-Orbit, All Rights Reserved.

Comprehensive Worldwide Patents database

New Patent Citation Commands & FAM Citation Report - see INFO PATCITE

Last update of file: 2002/10/16 (YYYY/MM/DD) 2002-41/UP (basic update)

Search statement 1

Query/Command : US5565109/PN**** SS 1: Results 1**

Search statement 2

Query/Command : PRT FULL NONSTOP LEGALALL

1 / 1 PLUSPAT - ©QUESTEL-ORBIT

PN - US5565109 A 19961015 [US5565109]
PN2 - US5565109 B1 19991123 [US5565109]
TI - (A) Hydantoin-enhanced halogen efficacy in pulp and paper applications
PA - (A) LONZA AG (US)
PA2 - (B1) LONZA AG (US)
IN - (A) SWEENEY PHILIP G (US)
AP - US32345994 19941014 [1994US-0323459]
PR - US32345994 19941014 [1994US-0323459]
IC - (A) C02F-001/50
EC - A01N-059/00 &M
C02F-001/50
D21H-021/04
PCL - ORIGINAL (O) : 210755000; CROSS-REFERENCE (X) : 162161000 210754000
210756000 210764000
DT - Corresponding document
CT - US3328294; US3749672; US4297224; US4427692; US4537697; US4698165;
US4925866
STG - (A) United States patent
STG2 - (B1) Reexam. Certif., n-nd reexam.
AB - Free halogen sources (e.g., sodium hypochlorite and chlorine) added as slimicides in high organic component process streams such as pulp and paper processing are rendered more efficacious by the addition of selected N-hydrogen compounds (namely, 5,5-dimethylhydantoin, 5-ethyl-5-methylhydantoin, cyanuric acid, succinimide, urea, 4,4-dimethyl-2-oxazolidinone, and glycouril) to the process stream. The latter compounds may be added to the process stream before or after the slimicide is added or combined with the slimicide and added directly thereto. The direct use of halogenated hydantoins has also been found to provide improved efficacy relative to free halogen sources. In addition, absorbable organic halogen by-products are reduced.

1 / 1 LGST - ©LEGSTAT

PN - US 5565109 [US5565109]
AP - US 323459/94 19941014 [1994US-0323459]
DT - US-P
ACT - 19941014 US/AE-A
APPLICATION DATA (PATENT)
US 323459/94 19941014 [1994US-0323459]

19941214 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
LONZA INC. 17-17 ROUTE 208 FAIR LAWN, NEW JERSEY 07410 * SWEENEY,
PHILIP GERDON : 19941111

19961015 US/A
PATENT

19970909 US/RR [+]
REQUEST FOR REEXAMINATION FILED
970722

19991123 US/B1 [+]
REEXAMINATION CERTIFICATE FIRST REEXAMINATION
Claims 1, 5-7, 9, 10 and 13 are cancelled. Claims 2-4, 8, 11 and 12 are determined to be
patentable as amended. New claims 14-16 are added and determined to be patentable.

20020528 US/RF
REISSUE APPLICATION FILED
20020110

UP - 2002-24

1 / 1 CRXX - ©CLAIMS/RRX

PN - 5,565,109 A 19961015 [US5565109]
PA - Lonza Inc
ACT - 19970722 REEXAMINATION REQUESTED
ISSUE DATE OF O.G.: 19970909
REEXAMINATION REQUEST NUMBER: 90/004700
Woodard Emhardt Naughton Moriarty & McNett, Indianapolis, IN

19991123 REEXAMINED CERTIFICATE B15565109, SEQUENCE 3940th
REQUEST - 90/004700, Woodard Emhardt Naughton Moriarty & McNett, Indianapolis,
IN, US (19970722)

CLAIM - AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED
THAT: Claims 1,5-7, 9,10 and 13 are cancelled. Claims 2-4, 8,11 and 12 are determined
to be patentable as amended. New claims 14-16 are added and determined to be
patentable. 14. In a process for making paper from pulp fiber wherein from 0.2 to 3 weight
percent of organic matter comprising from 95 to 99 weight percent pulp fiber is
maintained in a circulating water slurry in the presence of sizing, the improvement of
performing said process in the presence of a slimicidally effective amount of an
N-hydrogen compound and a slimicide in a molar ratio of from 0.1:1 to 10:1 in said
circulating water slurry; wherein said N-hydrogen compound is p-toluenesulfonamide,
dimethylhydantoin, methylethylhydantoin, cyanuric acid, succinimide, urea,
4,4-dimethyl-2-oxazolidinone, or glycouril and said slimicide is chlorine gas, bromine,
bromine chloride, an alkali metal or alkaline earth metal hypohalite, a halogenated
hydantoin, a halogenated cyanurate or halogenated cyanuric acid and the amount of the
N-hydrogen compounds present in said circulatory water slurry is sufficient to enhance
the biocidal efficacy of the slimicide and reduce absorbable organic halogen (AOX)
by-produce formation.

20020110 REISSUE REQUESTED
ISSUE DATE OF O.G.: 20020528
REISSUE REQUEST NUMBER: 10/044594
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 1724

Reissue Patent Number:

1 / 3 PAST - ©Thomson Derwent

AN - 200222-001890
PN - 5565109 A [US5565109]
OG - 2002-05-28
ACT - REISSUE APPLICATION FILED

2 / 3 PAST - ©Thomson Derwent

AN - 199947-001399
PN - 5565109 A [US5565109]
OG - 1999-11-23
ACT - REEXAMINATION CERTIFICATE

3 / 3 PAST - ©Thomson Derwent

AN - 199736-001413
PN - 5565109 A [US5565109]
OG - 1997-09-09
ACT - REQUEST FOR REEXAMINATION FILED

Query/Command : FILE INPADOC

PLUSPAT - Time in minutes : 0,71
The cost estimation below is based on Questel's
standard price list

Estimated cost :	1.56 USD
Records displayed and billed :	1
Estimated cost :	1.10 USD
Cost estimated for the last database search :	2.66 USD
Estimated total session cost :	4.36 USD

LGST - Time in minutes : 0,04
The cost estimation below is based on Questel's
standard price list

Estimated cost :	0.04 USD
Records displayed and billed :	1
Estimated cost :	0.57 USD
Cost estimated for the last database search :	0.61 USD
Estimated total session cost :	4.97 USD

CRXX - Time in minutes : 0,06
The cost estimation below is based on Questel's
standard price list

Estimated cost :	0.09 USD
Records displayed and billed :	1
Estimated cost :	5.00 USD
Cost estimated for the last database search :	5.09 USD
Estimated total session cost :	10.06 USD

PAST - Time in minutes : 0,18
The cost estimation below is based on Questel's
standard price list

Estimated cost :	0.35 USD
Records displayed and billed :	3
Estimated cost :	16.83 USD
Cost estimated for the last database search :	17.18 USD
Estimated total session cost :	27.24 USD

LITA - Time in minutes : 0,04
The cost estimation below is based on Questel's
standard price list

Estimated cost :	0.07 USD
------------------	----------

Cost estimated for the last database search : 0.07 USD
Estimated total session cost : 27.31 USD

Selected file: INPADOC

You are now connected to INPADOC
Covers 1968/1973 thru weekly updates (2002-42)
For information on content, (..)INFO INPD.

Search statement 1

Query/Command : FAM US5565109/PN

1 Patent Groups

**** SS 1: Results 10**

Search statement 2

Query/Command : FAMSTATE NONSTOP

1 / 10 INPADOC - ©INPADOC

PN - AU 692323 B2 19980604 [AU-692323]
TI - HYDANTOIN-ENHANCED HALOGEN EFFICACY IN PULP AND PAPER APPLICATIONS
IN - SWEENEY PHILIP GERDON
PA - LONZA AG
AP - AU 38968/95-A 19951013 [1995AU-0038968]
PR - US 323459/94-A 19941014 [1994US-0323459]
WO 9513537/95(US)-W 19951013 [1995WO-US13537]
IC - C02F-001/50

1 / 1 LEGALI - ©LEGSTAT

PN - AU 692323 [AU-692323]
DT - AU-P
ACTE - 20000203 AU/DA3
AMENDMENTS MADE SECTION 104
27051999
UP - 2000-43

2 / 10 INPADOC - ©INPADOC

PN - CA 2202631 AA 19960425 [CA2202631]
TI - HYDANTOIN-ENHANCED HALOGEN EFFICACY IN PULP AND PAPER APPLICATIONS
LA - ENG
IN - SWEENY PHILIP GERDON [US]
PA - LONZA AG [US]
AP - CA 2202631/95-A 19951013 [1995CA-2202631]
PR - US 323459/94-A 19941014 [1994US-0323459]
IC - C02F-001/50

1 / 1 LEGALI - ©LEGSTAT

PN - CA 2202631 [CA2202631]
DT - CA-P
ACTE - 19970414 CA/REFW-P
CORRESPONDS TO PCT APPLICATION
<WO 9611882> [WO9611882]
UP - 1998-31

3 / 10 INPADOC - ©INPADOC

PN - EP 785909 A1 19970730 [EP-785909]
TI - HYDANTOIN-ENHANCED HALOGEN EFFICACY IN PULP AND PAPER APPLICATIONS
LA - ENG
IN - SWEENY PHILIP GERDON [US]
PA - LONZA AG [US]
AP - EP 95938282/95-A 19951013 [1995EP-0938282]
PR - WO 9513537/95(US)-W 19951013 [1995WO-US13537]
US 323459/94-A 19941014 [1994US-0323459]
IC - C02F-001/50
DS - AT* BE* CH* DE* DK* ES* FR* GB* GR* IE* IT* LI* LU* MC* NL* PT* SE*

1 / 1 LEGALI - ©LEGSTAT

PN - EP 785909 [EP-785909]
AP - EP 95938282/95 19951013 [1995EP-0938282]
DT - EP-P
ACTE - 19951013 EP/AE-A
EP-APPLICATION
EP 95938282/95 19951013 [1995EP-0938282]

19970730 EP/AK-A1 [+]
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH
REPORT:
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

19970730 EP/A1 [+]
PUBLICATION OF APPLICATION WITH SEARCH REPORT

19970730 EP/17P [+]
REQUEST FOR EXAMINATION FILED
970514

19980225 EP/AK-A4 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A SUPPLEMENTARY
SEARCH REPORT:
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

19980225 EP/A4 [+]
SUPPLEMENTARY SEARCH REPORT
980107

19990915 EP/17Q [+]
FIRST EXAMINATION REPORT
19990728

UP - 1999-37

4 / 10 INPADOC - ©INPADOC

PN - EP 785909 A4 19980225 [EP-785909]
TI - HYDANTOIN-ENHANCED HALOGEN EFFICACY IN PULP AND PAPER
APPLICATIONS
LA - ENG
IN - SWEENEY PHILIP GERDON [US]
PA - LONZA AG [US]
AP - EP 95938282/95-A 19951013 [1995EP-0938282]
PR - WO 9513537/95(US)-W 19951013 [1995WO-US13537]
US 323459/94-A 19941014 [1994US-0323459]
IC - C02F-001/50
DS - AT* BE* CH* DE* DK* ES* FR* GB* GR* IE* IT* LI* LU* MC* NL* PT* SE*

1 / 1 LEGALI - ©LEGSTAT

PN - EP 785909 [EP-785909]
AP - EP 95938282/95 19951013 [1995EP-0938282]
DT - EP-P
ACTE - 19951013 EP/AE-A
EP-APPLICATION
EP 95938282/95 19951013 [1995EP-0938282]

19970730 EP/AK-A1 [+]
DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH
REPORT:
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

19970730 EP/A1 [+]
PUBLICATION OF APPLICATION WITH SEARCH REPORT

19970730 EP/17P [+]
REQUEST FOR EXAMINATION FILED
970514

19980225 EP/AK-A4 [+]
DESIGNATED CONTRACTING STATES MENTIONED IN A SUPPLEMENTARY
SEARCH REPORT:
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

19980225 EP/A4 [+]
SUPPLEMENTARY SEARCH REPORT
980107

19990915 EP/17Q [+]
FIRST EXAMINATION REPORT
19990728

UP - 1999-37

5 / 10 INPADOC - ©INPADOC

PN - NO 971667 A0 19970411 [NO9701667]
TI - HYDANTOINFORBEDRET HALOGENEFFEKTIVITET I MASSE- OG
PAPIRANVENDELSER
IN - SWEENY PHILIP GERDON [US]
PA - LONZA AG [US]
AP - NO 971667/97-A 19970411 [1997NO-0001667]
PR - US 323459/94-A 19941014 [1994US-0323459]
WO 9513537/95(US)-W 19951013 [1995WO-US13537]
IC - C02F-000/00

6 / 10 INPADOC - ©INPADOC

PN - NO 971667 A 19970602 [NO9701667]
TI - HYDANTOINFORBEDRET HALOGENEFFEKTIVITET I MASSE- OG
PAPIRANVENDELSER
IN - SWEENY PHILIP GERDON [US]
PA - LONZA AG [US]
AP - NO 971667/97-A 19970411 [1997NO-0001667]
PR - US 323459/94-A 19941014 [1994US-0323459]
WO 9513537/95(US)-W 19951013 [1995WO-US13537]
IC - C02F-001/50

7 / 10 INPADOC - ©INPADOC

PN - NZ 295586 A 19990329 [NZ-295586]
TI - METHOD OF REDUCING BY-PRODUCTS IN A CIRCULATING WATER SYSTEM
USING A N-HYDROGEN COMPOUND AND A SLIMICIDE, USE IN A
PAPER-MAKING PROCESS
IN - SWEENY PHILIP GERDON
PA - LONZA AG
AP - NZ 295586/95-A 19951013 [1995NZ-0295586]
PR - US 323459/94-A 19941014 [1994US-0323459]
WO 9513537/95(US)-W 19951013 [1995WO-US13537]
IC - C02F-001/68; C02F-001/76; C02F-001/70

8 / 10 INPADOC - ©INPADOC

PN - US 5565109 A 19961015 [US5565109]
TI - HYDANTOIN-ENHANCED HALOGEN EFFICACY IN PULP AND PAPER
APPLICATIONS
IN - SWEENY PHILIP G [US]
PA - LONZA AG [US]
AP - US 323459/94-A 19941014 [1994US-0323459]
PR - US 323459/94-A 19941014 [1994US-0323459]
IC - C02F-001/50

1 / 1 LEGALI - ©LEGSTAT

PN - US 5565109 [US5565109]

AP - US 323459/94 19941014 [1994US-0323459]

DT - US-P

ACTE - 19941014 US/AE-A
APPLICATION DATA (PATENT)
US 323459/94 19941014 [1994US-0323459]

19941214 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
LONZA INC. 17-17 ROUTE 208 FAIR LAWN, NEW JERSEY 07410 * SWEENEY,
PHILIP GERDON : 19941111

19961015 US/A
PATENT

19970909 US/RR [+]
REQUEST FOR REEXAMINATION FILED
970722

19991123 US/B1 [+]
REEXAMINATION CERTIFICATE FIRST REEXAMINATION
Claims 1, 5-7, 9, 10 and 13 are cancelled. Claims 2-4, 8, 11 and 12 are determined to be
patentable as amended. New claims 14-16 are added and determined to be patentable.

20020528 US/RF
REISSUE APPLICATION FILED
20020110

UP - 2002-24

9 / 10 INPADOC - ©INPADOC

PN - US 5565109 B1 19991123 [US5565109]

TI - HYDANTOIN-ENHANCED HALOGEN EFFICACY IN PULP AND PAPER
APPLICATIONS

IN - SWEENEY PHILIP G [US]

PA - LONZA AG [US]

AP - US 323459/94-A 19941014 [1994US-0323459]

PR - US 323459/94-A 19941014 [1994US-0323459]

IC - C02F-001/50

1 / 1 LEGALI - ©LEGSTAT

PN - US 5565109 [US5565109]
AP - US 323459/94 19941014 [1994US-0323459]
DT - US-P
ACTE - 19941014 US/AE-A
APPLICATION DATA (PATENT)
US 323459/94 19941014 [1994US-0323459]

19941214 US/AS02
ASSIGNMENT OF ASSIGNOR'S INTEREST
LONZA INC. 17-17 ROUTE 208 FAIR LAWN, NEW JERSEY 07410 * SWEENEY,
PHILIP GERDON : 19941111

19961015 US/A
PATENT

19970909 US/RR [+]
REQUEST FOR REEXAMINATION FILED
970722

19991123 US/B1 [+]
REEXAMINATION CERTIFICATE FIRST REEXAMINATION
Claims 1, 5-7, 9, 10 and 13 are cancelled. Claims 2-4, 8, 11 and 12 are determined to be
patentable as amended. New claims 14-16 are added and determined to be patentable.

20020528 US/RF
REISSUE APPLICATION FILED
20020110
UP - 2002-24

10 / 10 INPADOC - ©INPADOC

PN - WO 9611882 A1 19960425 [WO9611882]
TI - HYDANTOIN-ENHANCED HALOGEN EFFICACY IN PULP AND PAPER
APPLICATIONS
LA - ENG
IN - SWEENEY PHILIP GERDON [US]
PA - LONZA AG [US]; SWEENEY PHILIP GERDON [US]
AP - WO 9513537/95(US)-A 19951013 [1995WO-US13537]
PR - US 323459/94-A1 19941014 [1994US-0323459]
IC - C02F-001/50
DS - AL* AM* AT* AU* BB* BG* BR* BY* CA* CH* CN* CZ* DE* DK* EE* ES* FI*
GB* GE* HU* IS* JP* KE* KG* KP* KR* KZ* LK* LR* LT* LU* LV* MD* MG*
MK* MN* MX* NO* NZ* PL* PT* RO* RU* SD* SE* SG* SI* SK* TJ* TM* TT*
UA* US* UZ* VN* KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU
MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

1 / 2 LEGALI - ©LEGSTAT

PN - CA 2202631 [CA2202631]
DT - CA-P
ACTE - 19970414 CA/REFW-P
CORRESPONDS TO PCT APPLICATION
<WO 9611882> [WO9611882]
UP - 1998-31

2 / 2 LEGALI - ©LEGSTAT

PN - WO 9611882 [WO9611882]
AP - WO 9513537/95(US) 19951013 [1995WO-US13537]
DT - WO-P
ACTE - 19951013 WO/AE-A
APPLICATION DATA
WO 9513537/95(US) 19951013 [1995WO-US13537]

19960425 WO/AK-A1 [+]

DESIGNATED STATES CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT

AL AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE
KG KP KR KZ LK LR LT LU LV MD MG MK MN MX NO NZ PL PT RO RU SD SE
SG SI SK TJ TM TT UA US UZ VN

19960425 WO/AL-A1 [+]

DESIGNATED COUNTRIES FOR REGIONAL PATENTS CITED IN A PUBLISHED APPLICATION WITH SEARCH REPORT

KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ
CF CG CI CM GA GN ML MR NE SN TD TG

19960425 WO/A1 [+]

PUBLICATION OF THE INTERNATIONAL APPLICATION WITH THE INTERNATIONAL SEARCH REPORT

19960620 WO/DFPE

REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH MONTH FROM PRIORITY DATE

19960731 WO/121

EP: PCT APP. ART. 158 (1)

19970414 WO/ENP-AA

ENTRY INTO THE NATIONAL PHASE IN:
<CA 2202631>

19970814 WO/REG; DE/8642 [-]

DE: WITHDRAWAL
<DE>

UP - 1998-31